

# Smart Words for Smart Homeowners

THE EXPERIENCE OF EXPERTS AND THEIR ADVICE ON RELEVANT HOMEOWNER TOPICS

## Not All Caulking Is Alike

### Overview

There are at least four important reasons to fill, glue, seal and caulk the seams, cracks and openings in your home and office:

- 1) **Energy Loss:** Every open seam provides a path for heat and cold to migrate where they should not. That costs money and creates discomfort.
- 2) **Open Seams Are Unappealing:** Professional painters will seal all the creases and seams around window trim, door frames, air duct frames and baseboard radiator cases as part of the indoor room prep work. Make sure they use the proper caulking so it stays put. Don't let them use "painters caulk".
- 3) **Dust, Allergens and Dirt Entry:** Dust. The old dust sits behind moldings and at pipe penetrations for decades. Loose, airborne insulation fibers hang loose behind walls. These are some of the contaminants that you should keep where they belong...not floating in your interior air space.
- 4) **Insects And Critters:** Why let critters have an easy time getting into your space? Let them raise a family or build a nest somewhere else. Fill, seal and caulk seams, cracks and openings. It is important to your health and comfort.

### Kinds Of Caulking

There are dozens of caulking types and dozens of brands plus many quality level measures. To make the choice more complex some require application methods that are special to their chemistry. Before you buy any caulk you need to know where it is going and what you expect from it.



The first piece of advise is: **Read The Label and instructions from top to bottom.**

The second piece of advise is this; practice where no one will see the result of your first try [for the same reason they invented band practice rooms]. Caulking the seams and joints properly isn't as easy as it looks but it can be learned with a little effort and some repetition. If you've never applied a bead of caulk before - especially silicone based caulk - it is probably a good idea Not to make your first attempt in a highly visible area. Try gunning a consistent bead of caulk on

a scrap of paper or a section of throw-away material first.

### What About Caulk?

Caulk is used to seal air leaks, moisture leaks, cracks, seams and gaps between window or door frames and your homes siding. Some caulk lasts longer than others. Most caulk is cheap when compared to the labor to do it over again properly.



Most caulk is packaged in tubes that fit a standard caulking gun. When shopping, you will find many different products, with prices ranging from two to fifteen dollars or more per tube. Always opt for highest quality. Cheaper products may last very a few years [or months] and look shoddy from the beginning. While premium-priced caulks, like Phenoseal® are normally designed to last and look good for decades. We love Phenoseal® for most jobs but it must be applied properly.

If you have never bought caulk before do not rely only on what you think is a name brand to denote quality because it may not be a good indicator. Many one-of-a-kind products work better than others and these one-of-a-kind products may be made by companies with new or unusual sounding names. Ask the professionals for their advise because their reputation hangs in the balance of the materials they use.

### Where Should You Caulk And Seal?

Windows and doors are the obvious places to start. Check inside and outside for water and air leaks. Also seal where plumbing, ductwork, fans or electrical wiring pierce through exterior walls, floors, and ceilings. Insects and other critters use this as a pathway to interior warmth.

### Big Gaps

For large holes and gaps an inexpensive expanding foam product called Great Stuff® does the trick for homeowners. It is available in aerosol cans in specific expansion types for different gaps sizes and purposes. There are similar products for professionals. Expanding foam products are generally a good option

for closing holes up to 8 inches. For larger gaps a foam backing material [backer rods] should be put in place before a sealant or caulking is applied. We sometimes fill a crevice or chink with this foam as a base layer for caulking when the application is right.

Some professional ready-mixed construction chemicals, sold as caulk, such as silicone, polyurethane, polysulfide, silyl -terminated -polyether [a Silyl ether compound] or polyurethane and acrylic sealant are concoctions for special purposes and knowledgeable users. Unlike construction caulk (which is applied where no building movement is expected) some sealants are made from elastomeric materials that typically allow some movement; some of 20% to 35% of the width of the joint.

### Money And Comfort

In addition, leaks around electrical outlets can be handled by installing inexpensive foam gaskets specifically made for this air retarding application behind outlet plates.

The greatest source of wasted heating and cooling energy in a home is air leaks. If you have a pair of 6' 8" high exterior doors in your home that do not have weather-stripping, you can easily have an opening of 14" all along the edge where the doors slide together and meet. This 14" gap adds up to a 20 square-inch opening to the outside. If you recognized a hole this big in your wall, wouldn't you want it fixed?



### Cleaning

The most important step in caulking a joint is the surface preparation. The substrates that are going to be coated with caulk should be clean and dry. Any old caulk should be scraped out with a putty knife, a razor blade, or a painter's 5-in-1 tool. And if the substrate is damaged, it should be repaired before caulk is applied. If possible, caulking should be done when the joint is at its ambient midpoint. This means that it is best not to caulk in extreme temperatures or humidity.



Make sure you read the label and use the correct product type for each job. Wear gloves and eye protection when using expanding foam.

### Types Of Caulking

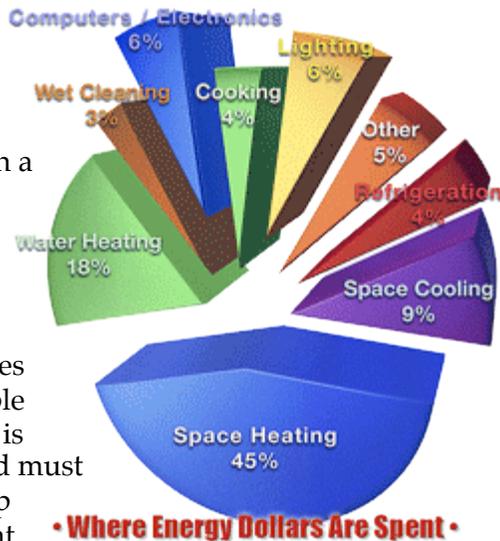
Caulk is one of the most useful products to use inside and outside of the home. It repairs, seals and prevents damage and can be easily replaced when it begins to show wear. Caulk is inexpensive and easy to apply. Here are a few categories:



- 1) **Acrylic Latex Caulk.** This type of caulk can be used for both indoor and outdoor projects. It works well to fill in gaps in moldings and baseboards and around door and window frames. It is fast drying and can be painted in 6-8 hours of applying. It also comes in different pigments so you can match a color to your job. This caulk is inexpensive and easy to apply. It is best if it is not used in wet places or areas that will endure a lot of moisture.
- 2) **Vinyl Adhesive Caulk.** This is a versatile all-purpose caulk that is perfect for almost any job. It bonds, caulks, and seals. It is a caulk and a glue so it stay put. Cured caulk is mildew resistant. It is fast-drying and can be painted with latex and oil-based paint. And some brands come with a long life guarantee. The kind we use is Phenoseal®.
- 3) **Vinyl Latex Caulk.** Vinyl latex caulk can be used in a variety of places, both interior and exterior. It is good for small gaps around windows and doors. It can also be used for tubs and showers because it withstands wet and damp areas well. It is also non-flammable and can be painted. This type of caulk does harden over time and lasts about five years.
- 4) **PVC Bond, Seal and Caulk.** This is the right way to bond 2 sections of AZEK®, Koma® or other PVC trim together. It's adhesion properties are legendary. If you do it correctly the glued sections will never come apart. We use BOND&FILL® when using AZEK® to replace rotted corner trim and flat trim on a house. Gluing the mating units make the butt edges a cemented together, one unit section. Amazing stuff when used correctly. Please read the labels.
- 5) **Siliconized Acrylic Caulk.** This type of caulk combines silicone with acrylic latex caulk for a durable, waterproof formula. It is good for both interior and exterior projects and adheres well to most surfaces. It is especially good for tubs, tile, glass and ceramic tile surfaces. It comes in a clear form and in a variety of colors, is non-flammable, can be painted and is mildew resistant. This caulk remains flexible and has a life expectancy of over 25

years. It is also very easy to apply and messes can be cleaned up with water.

- 6) **100% Silicone Caulk.** Silicone caulk is excellent for tubs and showers and any area that has a lot of moisture. It work well on non-porous surfaces such as ceramic tile, glass and metal surfaces and is mold and mildew resistant. This type of caulk does not adhere to wood surfaces. It cannot be painted and only comes in a clear or white. Silicone caulk is difficult to apply but does remain flexible when dry. It is non-toxic and must be cleaned up with a solvent. Silicone caulk does have a strong odor so you should work in a well-ventilated place. Silicone sealants form a durable, water-tight seal, but are not paintable. Some silicone sealants are made to be paintable with certain types of paint such as water or oil-based paints. Other sealants may not be paintable so you need to check.



- 7) **Painter's Caulk.** This is an inexpensive [cheap] latex caulk that painters use to fill in holes and cracks before painting. It can also be used in corners to provide a smooth joint where painters are using contrasting colors. This caulk applies easily and smoothly. It can be painted within one hour of application and cleans up nicely with soap and water. The results are often disappointing; it chinks, hardens and falls out over time. I don't like it.
- 8) **Tub and Tile Acrylic Sealant.** This is an excellent choice for all your bathroom and kitchen projects. It is mold and mildew resistant, gives a good watertight seal and adheres to almost all surfaces such as tile, tubs, glass, metal, wood, drywall and plaster. It also comes in a few different colors and can be painted. This product is non-flammable and can be cleaned up with soap and water. It stays flexible when dry and can last for over 10 years.
- 9) **Adhesive Caulk.** This is an all-purpose caulk that is especially good for high humidity environments such as kitchens and bathrooms. It adheres well to

many surfaces like ceramic tile, porcelain, wood, drywall, plaster and metal. mildewcide has been added to resist mold and mildew growth in damp areas. This caulk also works as a strong adhesive for replacing loose tiles, molding and other such items. It is easy to apply and can be cleaned up with soap and water.

- 10) **Butyl Rubber Sealant.** This is a strong exterior sealant that can be used on wood, metal, concrete and brick. It is good for sealing joints in gutters and around chimneys as well as sealing around skylights and roof vents. It is also the best waterproof sealant for house foundations. It is difficult to apply and slow to dry and clean-up requires a solvent. This sealant has a life expectancy of 2-10 years.
- 11) **Roof Repair Caulk.** This caulk is a butyl rubber / asphalt formula that works well on roofing, skylights and for sealing flashing. It can also repair small areas in asphalt. It is weatherproof and waterproof and can be used on wet and dry surfaces. This caulk can also be painted. It requires mineral spirits for clean-up.
- 12) **Concrete and Mortar Repair Caulk.** This is an interior / exterior caulk that can repair cracks and holes in brick, concrete, stone, stucco, and metal as well as textured walls and ceilings. It has a textured finish and retains some flexibility when dry. It can be painted and cleans up easily with soap and water.

It is recommended to always read the manufacturers label before choosing a particular type of caulk for your project. With so many different types of caulk available you are sure to find the right one for your project.

### How To Apply Non-Silicone Caulking

- 1) Scrape out the old caulk and clean the seam thoroughly. Caulk will not adhere to old caulking or a dirty or dusty surface.
- 2) Cut the tip of the cartridge nozzle at a 45 angle about 0.25" below the top.
- 3) The opening you create should be 50% larger than the seam or crack you intend to seal.
- 4) Insert the caulking gun probe or long wire hangar into this hole to puncture the membrane inside the tube of Caulk.
- 5) Apply the caulk with the opening parallel to the joint. It doesn't matter if you push or pull the caulking gun as long as you get enough caulk into the joint for it to bond or fill to both substrates. Your objective is to cover the seam with enough, but not too much caulk.

